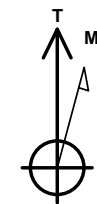
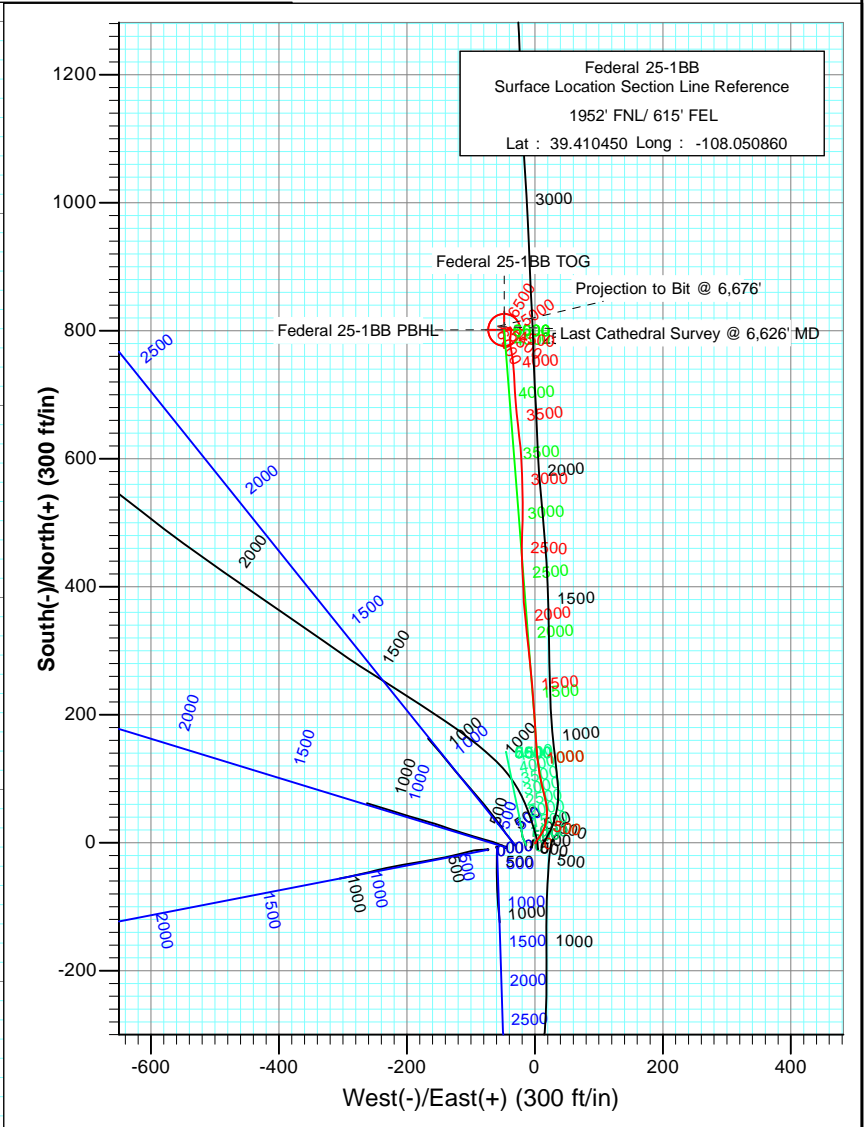
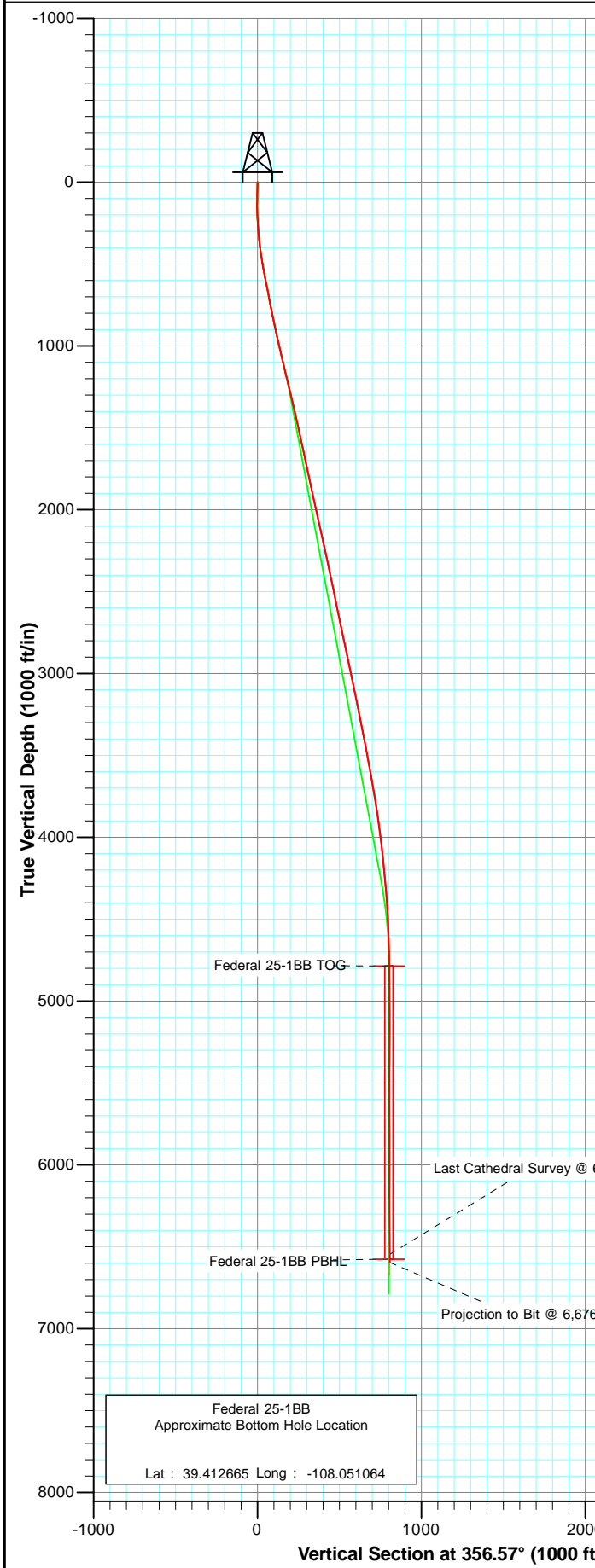




Project: S. Piceance (Parachute)
 Site: SENE Sec25-T7S-R96W (PH-25)
 Well: Federal 25-1BB
 Wellbore: DD
 Plan: FINAL



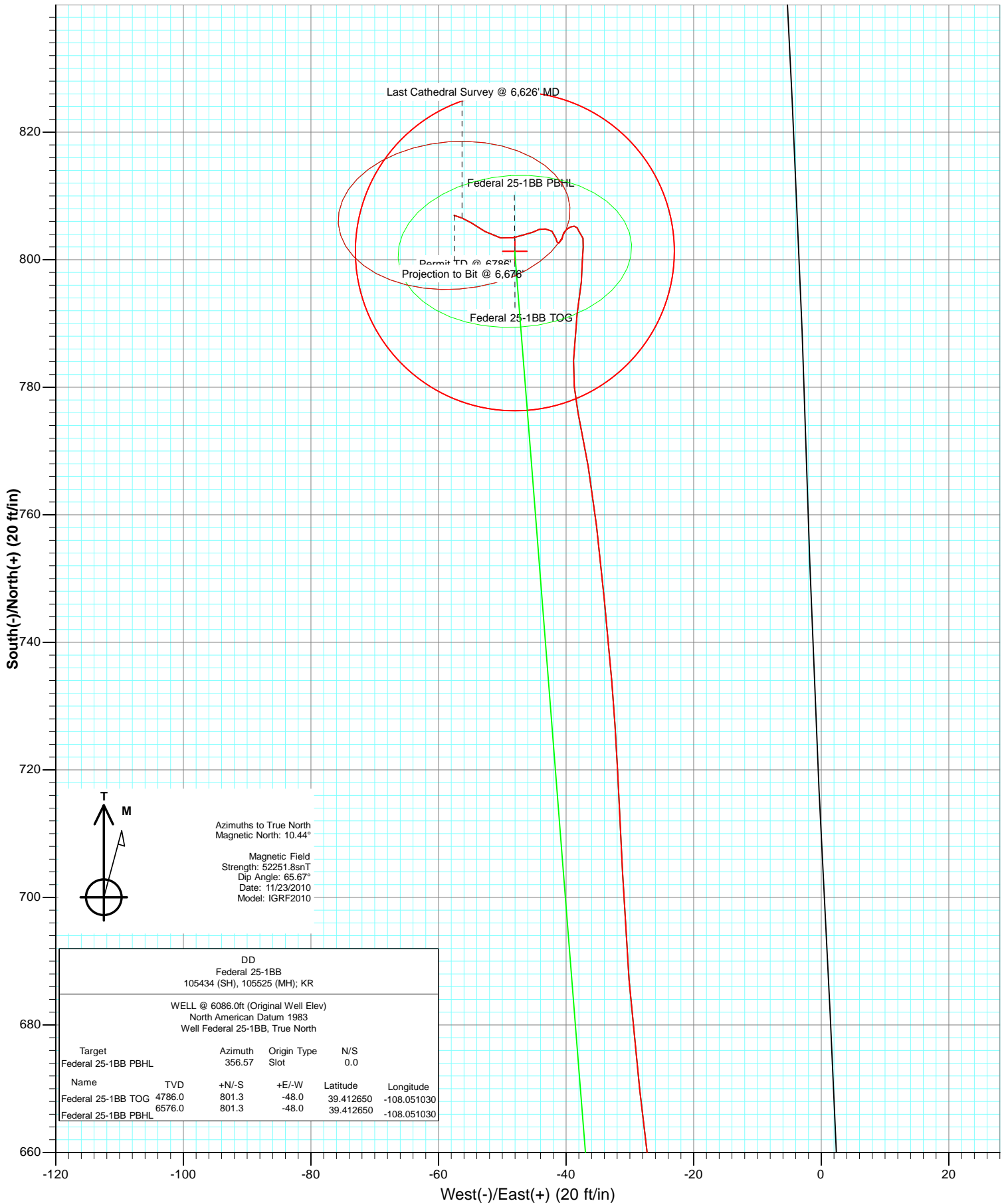
Azimuths to True North
 Magnetic North: 10.44°

Magnetic Field
 Strength: 52251.8snT
 Dip Angle: 65.67°
 Date: 11/23/2010
 Model: IGRF2010

DD Federal 25-1BB 105434 (SH), 105525 (MH); KR					
WELL @ 6086.0ft (Original Well Elev) North American Datum 1983 Well Federal 25-1BB, True North					
Target	Azimuth	Origin Type	N/S		
Federal 25-1BB PBHL	356.57	Slot	0.0		
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
Federal 25-1BB TOG	4786.0	801.3	-48.0	39.412650	-108.051030
Federal 25-1BB PBHL	6576.0	801.3	-48.0	39.412650	-108.051030



Project: S. Piceance (Parachute)
 Site: SENE Sec25-T7S-R96W (PH-25)
 Well: Federal 25-1BB
 Wellbore: DD
 Plan: FINAL



Cathedral Energy

Survey Report

Company: EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference: Well Federal 25-1BB
Project: S. Piceance (Parachute)	TVD Reference: WELL @ 6086.0ft (Original Well Elev)
Site: SENE Sec25-T7S-R96W (PH-25)	MD Reference: WELL @ 6086.0ft (Original Well Elev)
Well: Federal 25-1BB	North Reference: True
Wellbore: DD	Survey Calculation Method: Minimum Curvature
Design: DD	Database: EDM 5000.1 US Multi Users DB

Project S. Piceance (Parachute), Garfield County, CO		
Map System: US State Plane 1983	System Datum: Mean Sea Level	
Geo Datum: North American Datum 1983		
Map Zone: Colorado Central Zone		

Site SENE Sec25-T7S-R96W (PH-25)				
Site Position:	Northing: 1,584,503.36 ft	Latitude: 39.410440		
From: Lat/Long	Easting: 2,279,392.91 ft	Longitude: -108.050780		
Position Uncertainty: 0.0 ft	Slot Radius: 0.000in	Grid Convergence: -1.61 °		

Well Federal 25-1BB				
Well Position	+N/-S 0.0 ft	Northing: 1,584,507.63 ft	Latitude: 39.410450	
	+E/-W 0.0 ft	Easting: 2,279,370.42 ft	Longitude: -108.050860	
Position Uncertainty	0.0 ft	Wellhead Elevation: ft	Ground Level: 6,064.0 ft	

Wellbore DD					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/23/2010	10.44	65.67	52,252

Design DD				
Audit Notes:				
Version: 1.0	Phase: ACTUAL	Tie On Depth: 0.0		
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	356.57

Survey Program		Date 12/2/2010
From (ft)	To (ft)	Survey (Wellbore)
82.0	6,282.0	Survey #1 (DD)
		Tool Name MWD
		Description Geolink MWD

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
82.0	0.80	164.90	82.0	-0.6	0.1	-0.6	0.98	0.98	
113.0	0.80	140.00	113.0	-0.9	0.3	-0.9	1.11	0.00	
143.0	0.80	77.90	143.0	-1.0	0.7	-1.1	2.75	0.00	
173.0	1.20	35.10	173.0	-0.7	1.1	-0.8	2.73	1.33	
203.0	2.00	18.50	203.0	0.0	1.4	-0.1	3.06	2.67	
233.0	3.10	18.20	232.9	1.3	1.8	1.2	3.67	3.67	
263.0	4.70	29.80	262.9	3.1	2.7	2.9	5.92	5.33	
293.0	5.70	36.60	292.8	5.4	4.2	5.1	3.91	3.33	
323.0	6.80	35.70	322.6	8.0	6.1	7.6	3.68	3.67	
354.0	7.40	35.30	353.3	11.1	8.3	10.6	1.94	1.94	
384.0	8.00	32.40	383.1	14.5	10.6	13.8	2.38	2.00	
414.0	8.80	25.40	412.7	18.3	12.7	17.5	4.32	2.67	

Cathedral Energy

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Federal 25-1BB
Project:	S. Piceance (Parachute)	TVD Reference:	WELL @ 6086.0ft (Original Well Elev)
Site:	SENE Sec25-T7S-R96W (PH-25)	MD Reference:	WELL @ 6086.0ft (Original Well Elev)
Well:	Federal 25-1BB	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
444.0	9.40	19.90	442.4	22.7	14.5	21.8	3.52	2.00	
475.0	10.20	16.80	472.9	27.7	16.2	26.7	3.09	2.58	
505.0	10.80	10.50	502.4	33.0	17.4	31.9	4.32	2.00	
535.0	11.00	6.80	531.9	38.6	18.3	37.4	2.43	0.67	
566.0	10.70	3.60	562.3	44.4	18.8	43.2	2.17	-0.97	
596.0	10.90	357.60	591.8	50.0	18.9	48.8	3.80	0.67	
626.0	10.90	353.00	621.2	55.7	18.4	54.5	2.90	0.00	
656.0	10.80	349.70	650.7	61.3	17.6	60.1	2.10	-0.33	
748.0	11.50	344.60	741.0	78.6	13.6	77.6	1.31	0.76	
839.0	11.70	349.50	830.1	96.4	9.5	95.7	1.10	0.22	
929.0	12.50	350.10	918.1	115.0	6.2	114.4	0.90	0.89	
1,020.0	12.90	355.00	1,006.9	134.8	3.6	134.3	1.26	0.44	
1,088.0	13.40	356.30	1,073.1	150.2	2.4	149.8	0.85	0.74	
1,241.0	13.60	356.20	1,221.9	185.9	0.1	185.5	0.13	0.13	
1,335.0	13.30	355.90	1,313.3	207.7	-1.4	207.4	0.33	-0.32	
1,428.0	12.70	355.60	1,403.9	228.5	-3.0	228.3	0.65	-0.65	
1,521.0	12.10	354.50	1,494.8	248.4	-4.7	248.3	0.69	-0.65	
1,615.0	12.70	355.10	1,586.6	268.5	-6.5	268.4	0.65	0.64	
1,708.0	11.80	352.80	1,677.4	288.1	-8.6	288.1	1.10	-0.97	
1,801.0	12.50	355.20	1,768.4	307.6	-10.6	307.7	0.93	0.75	
1,895.0	12.00	353.80	1,860.2	327.5	-12.5	327.6	0.62	-0.53	
1,988.0	12.30	354.70	1,951.1	346.9	-14.5	347.2	0.38	0.32	
2,081.0	12.00	353.70	2,042.1	366.4	-16.5	366.7	0.39	-0.32	
2,174.0	13.20	358.40	2,132.8	386.6	-17.8	387.0	1.70	1.29	
2,268.0	12.50	357.30	2,224.5	407.5	-18.6	407.9	0.79	-0.74	
2,361.0	11.70	356.70	2,315.4	427.0	-19.6	427.4	0.87	-0.86	
2,454.0	11.40	357.90	2,406.5	445.6	-20.5	446.0	0.41	-0.32	
2,548.0	12.20	1.70	2,498.5	464.8	-20.5	465.2	1.19	0.85	
2,641.0	11.60	2.40	2,589.5	484.0	-19.9	484.3	0.66	-0.65	
2,734.0	12.30	1.00	2,680.5	503.2	-19.3	503.5	0.81	0.75	
2,828.0	11.60	0.50	2,772.5	522.7	-19.0	522.9	0.75	-0.74	
2,921.0	12.40	358.80	2,863.4	542.0	-19.2	542.2	0.94	0.86	
3,014.0	11.90	357.90	2,954.4	561.6	-19.7	561.8	0.57	-0.54	
3,108.0	11.50	358.10	3,046.4	580.6	-20.4	580.8	0.43	-0.43	
3,201.0	11.00	357.50	3,137.6	598.8	-21.1	598.9	0.55	-0.54	
3,295.0	11.60	353.70	3,229.8	617.1	-22.5	617.4	1.02	0.64	
3,388.0	11.30	353.80	3,320.9	635.5	-24.5	635.8	0.32	-0.32	
3,481.0	10.50	353.50	3,412.3	652.9	-26.5	653.4	0.86	-0.86	
3,574.0	10.70	353.10	3,503.7	669.9	-28.5	670.4	0.23	0.22	
3,668.0	10.50	355.90	3,596.1	687.1	-30.1	687.7	0.59	-0.21	
3,762.0	10.10	357.20	3,688.6	703.9	-31.1	704.5	0.49	-0.43	
3,855.0	9.40	357.20	3,780.2	719.6	-31.9	720.3	0.75	-0.75	
3,948.0	8.20	355.30	3,872.1	733.8	-32.8	734.5	1.33	-1.29	
4,042.0	7.90	354.20	3,965.2	746.9	-34.0	747.6	0.36	-0.32	
4,135.0	6.20	353.70	4,057.5	758.3	-35.2	759.0	1.83	-1.83	
4,228.0	5.40	350.00	4,150.0	767.6	-36.5	768.4	0.95	-0.86	
4,322.0	5.10	348.60	4,243.6	776.1	-38.1	776.9	0.35	-0.32	
4,415.0	5.10	1.70	4,336.2	784.2	-38.8	785.2	1.25	0.00	
4,509.0	3.90	7.80	4,430.0	791.6	-38.3	792.5	1.37	-1.28	
4,602.0	2.20	7.30	4,522.8	796.5	-37.6	797.3	1.83	-1.83	
4,695.0	1.70	356.00	4,615.8	799.6	-37.5	800.4	0.68	-0.54	
4,789.0	1.20	15.60	4,709.7	802.0	-37.3	802.8	0.74	-0.53	
4,882.0	0.70	327.50	4,802.7	803.4	-37.4	804.2	0.97	-0.54	

Cathedral Energy

Survey Report

Company: EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference: Well Federal 25-1BB
Project: S. Piceance (Parachute)	TVD Reference: WELL @ 6086.0ft (Original Well Elev)
Site: SENE Sec25-T7S-R96W (PH-25)	MD Reference: WELL @ 6086.0ft (Original Well Elev)
Well: Federal 25-1BB	North Reference: True
Wellbore: DD	Survey Calculation Method: Minimum Curvature
Design: DD	Database: EDM 5000.1 US Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
4,975.0	0.70	331.10	4,895.7	804.4	-37.9	805.2	0.05	0.00	
5,069.0	0.20	338.00	4,989.7	805.0	-38.3	805.9	0.53	-0.53	
5,162.0	0.50	284.00	5,082.7	805.3	-38.7	806.1	0.45	0.32	
5,255.0	0.40	224.00	5,175.7	805.1	-39.3	806.0	0.49	-0.11	
5,349.0	0.50	247.80	5,269.7	804.7	-40.0	805.7	0.22	0.11	
5,442.0	0.50	189.60	5,362.7	804.2	-40.4	805.2	0.52	0.00	
5,535.0	0.70	197.80	5,455.7	803.2	-40.6	804.2	0.23	0.22	
5,629.0	0.40	258.10	5,549.7	802.6	-41.1	803.7	0.65	-0.32	
5,722.0	1.00	350.30	5,642.7	803.4	-41.6	804.4	1.17	0.65	
5,816.0	0.70	302.60	5,736.7	804.5	-42.2	805.6	0.79	-0.32	
5,909.0	0.70	275.10	5,829.7	804.8	-43.3	806.0	0.36	0.00	
6,002.0	0.50	251.90	5,922.7	804.8	-44.2	806.0	0.33	-0.22	
6,095.0	0.90	243.70	6,015.7	804.3	-45.2	805.6	0.44	0.43	
6,189.0	1.00	263.10	6,109.7	803.9	-46.7	805.2	0.36	0.11	
6,282.0	1.10	248.10	6,202.6	803.5	-48.4	804.9	0.31	0.11	
6,375.0	1.40	286.10	6,295.6	803.4	-50.3	805.0	0.93	0.32	
6,469.0	1.80	297.50	6,389.6	804.4	-52.7	806.2	0.54	0.43	
6,562.0	1.40	307.30	6,482.5	805.8	-54.9	807.6	0.52	-0.43	
6,626.0	1.50	288.60	6,546.5	806.5	-56.3	808.5	0.75	0.16	Last Cathedral Survey @ 6,626' MD
6,676.0	1.50	288.60	6,596.5	807.0	-57.5	809.0	0.00	0.00	Projection to Bit @ 6,676'

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Federal 25-1BB TOG - hit/miss target - Shape	0.00	0.00	4,786.0	801.3	-48.0	1,585,309.98	2,279,344.91	39.412650	-108.051030
- survey misses target center by 10.9ft at 4865.2ft MD (4786.0 TVD, 803.2 N, -37.3 E)									
- Point									
Federal 25-1BB PBHL - survey misses target center by 10.5ft at 6655.2ft MD (6575.7 TVD, 806.8 N, -57.0 E)	0.00	0.00	6,576.0	801.3	-48.0	1,585,309.98	2,279,344.91	39.412650	-108.051030
- Circle (radius 25.0)									

Survey Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
6,626.0	6,546.5	806.5	-56.3	Last Cathedral Survey @ 6,626' MD	
6,676.0	6,596.5	807.0	-57.5	Projection to Bit @ 6,676'	

Checked By: _____ Approved By: _____ Date: _____